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the pre-reading means comprises a judging means for judging on which of the areas the reference line is crossing, and reading means for storing in the work memory the background data of the area judged as being crossed with the reference line by this judging means.

Please replace the paragraph beginning at page 10, line 4 with the following paragraph:

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The communication device 33 is, for example, a modem or terminal adapter, structured to enable the access of this game device body 1, and to function as an adapter connecting this game device body 1 with an external circuit. The communication device 33 receives data transmitted from a server for game supply including an internet server to be connected to a public circuit net, and is able to supply such data to the bus of the CPU block 30. A public circuit net may be a subscription line, dedicated line, wire/wireless, etc.

Please replace the paragraph beginning at page 13, line 8 with the following paragraph:

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The CPU 301, at first, reads operational information by a player (step S1), and specifies the current location of the vehicle and the proceeding direction on the xz face of the world coordinate system (step S2).

Please replace the paragraph beginning at page 13, line 20 with the following paragraph:

On the other hand, when the judgment is "yes" at step S3; i.e. reading start line LN2 crosses one or more new area ARs, the CPU 301 judges whether there are any required number of consecutive memory block MBs unused in the main memory 302 (step S4). However, in case the number of required memory blocks to store background data is one, "required number of consecutive memory block" means one memory block. When a judgment at this step S4 is "yes," background data (landform data) is to be read from a new area AR, and written in the vacant memory block.

Please replace the paragraph beginning at page 14, line 1 with the following paragraph:

On the other hand, when the judgment is "no" at step S, i.e. there are no required number of consecutive memory blocks unused, the CPU 301 judges whether, in case of a city, for example, there are required number of memory blocks which stores background data consecutively for one city area in used memory blocks MB, (step S6). When this judgment is "yes," background data for a new area AR is to be stored in the memory block which represents the largest value (step S7) by comparing the count values corresponding to the memory block MB. It can be assumed that a large count value suggests that the frequency of usage for the background data of the memory block was low in the past, and will be the same in the future as well.

Accordingly, background data of such memory block takes priority to be renewed.

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Please replace the paragraph beginning at page 14, line 15 with the following paragraph:

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On the other hand, when the judgment is "no" at step S6, search is made for memory blocks that store background data consecutively over areas with a plurality of types, and more than one set of required number of blocks is assured by combining them (step S8). Next, for each set of the consecutive memory blocks, the average count value of the respective memory blocks is computed (step S9). Furthermore, the CPU 301 compares computed count values, judges a set of memory blocks with the largest count value, and stores in the memory background data of the new area AR for the respective memory blocks of the set (step S10). The reason for searching a set of memory blocks with the largest count value is the same as the above.

Please replace the paragraph beginning at page 15, line 11 with the following paragraph:

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The example of Fig. 9 indicates a renewing process of the memory block MB with background data stored in the past by new background data. In other words, this indicates that, after detecting a new area and renewing the past consecutive background data with the new background data, vehicles have already moved into this new area. Especially, the example of Fig. 9 explains the condition that requires four consecutive memory blocks as places to secure the background data of the new area. Accordingly, the average count value was operated through the processing of steps S3, S4, S6 and S8 through S10 in Fig. 7, and memory block Nos. 6 through 9 were

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selected. In this case, an adjacent memory block No. 10 is handled as a vacant block. In this example, background data read later (for example, background data of block Nos. 6 through 10) is deleted earlier than those read previously (for example, background data of block Nos. 1 through 5). This is because the running course of vehicle is not linear, but, in many cases, so-called "meandering" or "zigzag" running, in which vehicles directly enter into the area read in the past from another course.

IN THE CLAIMS

Please cancel claims 2-5 and amend claims 1, 6-8, and 10-12 as follows:

1. (Twice amended) A game device which reads from a storage means, prior to image processing, background data required in games for displaying a moving object within a virtual three-dimensional space together with a background, comprising:

pre-reading means for pre-reading said background data from said storage means by establishing an area for pre-reading which includes: setting a predetermined angle-of-visibility based on a direction of the moving object, setting a limit-line of a visual field at a predetermined distance towards a front of the visual field, and setting a pre-reading start line at a predetermined distance beyond a front of the limit-line of the visual field;

wherein said storage means stores said background data by dividing said background data into a plurality of areas in advance;

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